M-7

US Model
Canadian Model
AEP Model
UK Model
E Model

No. 1
October, 1985

Subject: Circuit and Parts Change

1. Circuit and PC Board Change

- **IC101 CX807 → CX20107**
- **PC Board change**
- **C·R changes**

2. Mechanical Parts Change

Rear Cabinet

Part No.	
FORMER	3-309-811-01 3-309-811-11 3-309-811-21
NEW	3-309-811-03 3-309-811-13 3-309-811-23

Applicable Serial Number

US model	189,801 and later
Canadian, AEP, UK, E model	184,701 and later

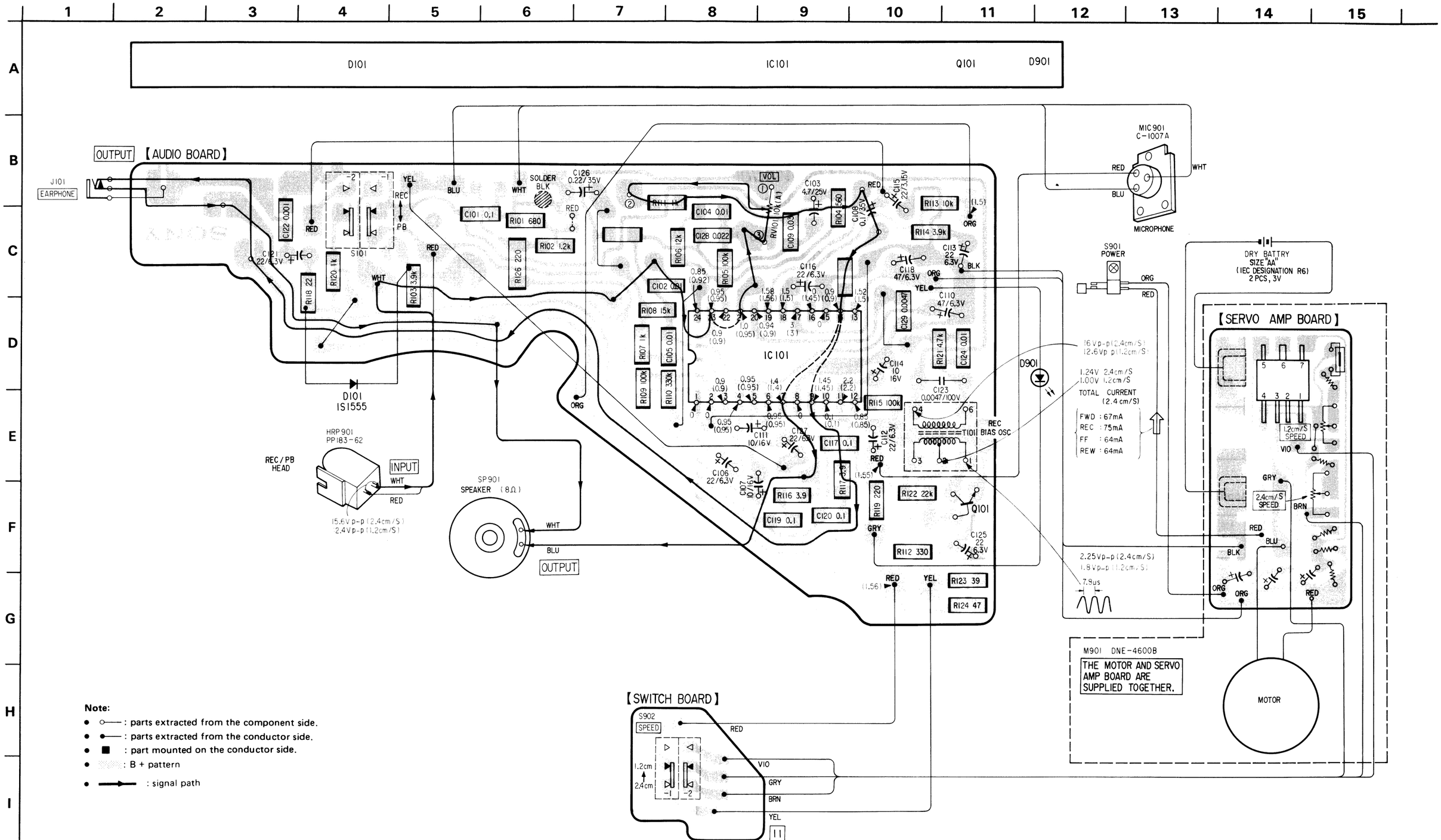
MICROFILM

MICROCASSETTE-CORDER
SONY®
TC

MOUNTING DIAGRAM
— Conductor Side —

M-7 M-7

Serial No. US model 189,801 and later
Canadian, AEP, UK, E model 184,701 and later



Note:

- ○— : parts extracted from the component side.
- ●— : parts extracted from the conductor side.
- ■ : part mounted on the conductor side.
- ▒ : B + pattern
- ▬▶ : signal path

【AUDIO BOARD】

IC101 CX20107
PRE AMP/LINE AMP/AGC/POWER AMP

IC 101

PB PRE
PB LINE
REC DRIVE
LED DRIVE
REC LINE
REC PRE
AGC
REF
RIPPLE FILTER
MUTE ADJUST
SYSTEM CONTROL
STANDARD VOLTAGE
SPEAKER POWER AMP B
EARPHONE POWER AMP A

D101 IS1555

SP901 8Ω

EARPHONE J101

REC/BATT D901 GL9PR10

MIC 901 C-1007A
MIC
MIC SENSITIVITY
VOL
RV101 10k(A)

HRP901 PP183-62
HE901 ESF194-62

S101-1 PB→REC
S101-2 PB→REC

T101
Q101 2SC536SP BIAS OSC

IC LAG553

【SERVO AMP BOARD】
(INCLUDED IN MOTOR)

M901 DNE-4600B

S901(POWER)

DRY BATTERY SIZE "AA" (IEC DESIGNATION R6) 2PCS,3V

S902-1 1.2cm←2.4cm
S902-2 1.2cm←2.4cm
SPEED

【SWITCH BOARD】

THE MOTOR AND SERVO AMP BOARD ARE SUPPLIED TOGETHER.

2.4cm/S 15.6Vp-p
1.2cm/S 12.4Vp-p

2.4cm/S --- 2.25Vp-p
1.2cm/S --- 1.8Vp-p

2.4cm/s (1.24V)
1.2cm/s (1.00V)

7.8μs

TOTAL CURRENT(2.4cm/S)
FWD : 67mA
REC : 75mA
FF : 64mA
REW: 64mA

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- ▭ : adjustment for repair.
- ▬ : B+ bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal conditions.
  ( ) : record
  no mark : playback

- Voltage variations may be noted due to normal production tolerances.
- Total current is measured with no cassette installed.
- ▨ : signal path.

Ref. No.	Switch	Position
S1	REC/PB	PB
S901	POWER	OFF
S902	SPEED	2.4cm

ELECTRICAL PARTS LIST

NOTE:
- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuitsin a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF:μF, PF:μμF.

RESISTORS
- All resistors are in ohms.
- F : nonflammable

COILS
- MMH : mH, UH : μH

SEMICONDUCTORS
In each case, U : μ, for example:
UA...: μA..., UPA...: μPA..., UPC...: μPC,
UPD...: μPD...

ELECTRICAL PARTS

Ref.No.	Part No.	Description		
	*1-615-711-11	PC BOARD, AUDIO		
C101	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C102	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V
C103	1-123-616-00	ELECT 4.7MF	20%	25V
C104	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V
C105	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V
C106	1-124-222-00	ELECT 22MF	20%	6.3V
C107	1-123-617-00	ELECT 10MF	20%	16V
C108	1-131-341-00	TANTALUM 0.1MF	20%	35V
C109	1-163-810-00	CERAMIC CHIP 0.03MF	10%	25V
C110	1-123-647-00	ELECT 47MF	20%	6.3V
C111	1-123-617-00	ELECT 10MF	20%	16V
C112	1-123-618-00	ELECT 22MF	20%	6.3V
C113	1-123-618-00	ELECT 22MF	20%	6.3V
C114	1-123-617-00	ELECT 10MF	20%	16V
C115	1-131-391-00	TANTALUM 22MF	20%	3.15V
C116	1-123-618-00	ELECT 22MF	20%	6.3V
C117	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C118	1-123-647-00	ELECT 47MF	20%	6.3V
C119	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C120	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C121	1-123-618-00	ELECT 22MF	20%	6.3V
C122	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V
C123	1-108-373-00	MYLAR 0.0047MF	10%	100V
C124	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V
C125	1-123-618-00	ELECT 22MF	20%	6.3V
C126	1-131-343-00	TANTALUM 0.22MF	20%	35V
C127	1-123-618-00	ELECT 22MF	20%	6.3V
C128	1-163-033-00	CERAMIC CHIP 0.022MF	10%	25V
C129	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V
D101	8-719-815-55	DIODE 1S1555		
IC101	8-752-010-71	IC CX20107		
J101	1-507-720-00	JACK		
JR101	1-216-295-00	METAL CHIP 0	5%	1/10W
JR102	1-216-295-00	METAL CHIP 0	5%	1/10W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
Q101	8-729-853-63	TRANSISTOR 2SC536SP-G			
R101	1-216-045-00	METAL CHIP	680	5%	1/10W
R102	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R103	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R104	1-216-043-00	METAL CHIP	560	5%	1/10W
R105	1-216-097-00	METAL CHIP	100K	5%	1/10W
R106	1-216-075-00	METAL CHIP	12K	5%	1/10W
R107	1-216-049-00	METAL CHIP	1K	5%	1/10W
R108	1-216-077-00	METAL CHIP	15K	5%	1/10W
R109	1-216-097-00	METAL CHIP	100K	5%	1/10W
R110	1-216-109-00	METAL CHIP	330K	5%	1/10W
R111	1-216-049-00	METAL CHIP	1K	5%	1/10W
R112	1-216-037-00	METAL CHIP	330	5%	1/10W
R113	1-216-073-00	METAL CHIP	10K	5%	1/10W
R114	1-216-063-00	METAL CHIP	3.9K	5%	1/10W
R115	1-216-097-00	METAL CHIP	100K	5%	1/10W
R116	1-216-306-11	METAL CHIP	3.9	5%	1/10W
R117	1-216-306-11	METAL CHIP	3.9	5%	1/10W
R118	1-216-009-00	METAL CHIP	22	5%	1/10W
R119	1-216-033-00	METAL CHIP	220	5%	1/10W
R120	1-216-049-00	METAL CHIP	1K	5%	1/10W
R121	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R122	1-216-081-00	METAL CHIP	22K	5%	1/10W
R123	1-216-015-00	METAL CHIP	39	5%	1/10W
R124	1-216-017-00	METAL CHIP	47	5%	1/10W
R126	1-216-182-00	METAL CHIP	220	5%	1/8W
RV101	1-228-121-00	RES, VAR, CARBON 10K			
S101	1-553-223-00	SWITCH, SLIDE			
S902	1-553-601-00	SWITCH, SLIDE			
T101	1-433-207-00	TRANSFORMER, BIAS OSCILLATOR			

9-951-019-82

English
85J04109-1
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